

Figure 1

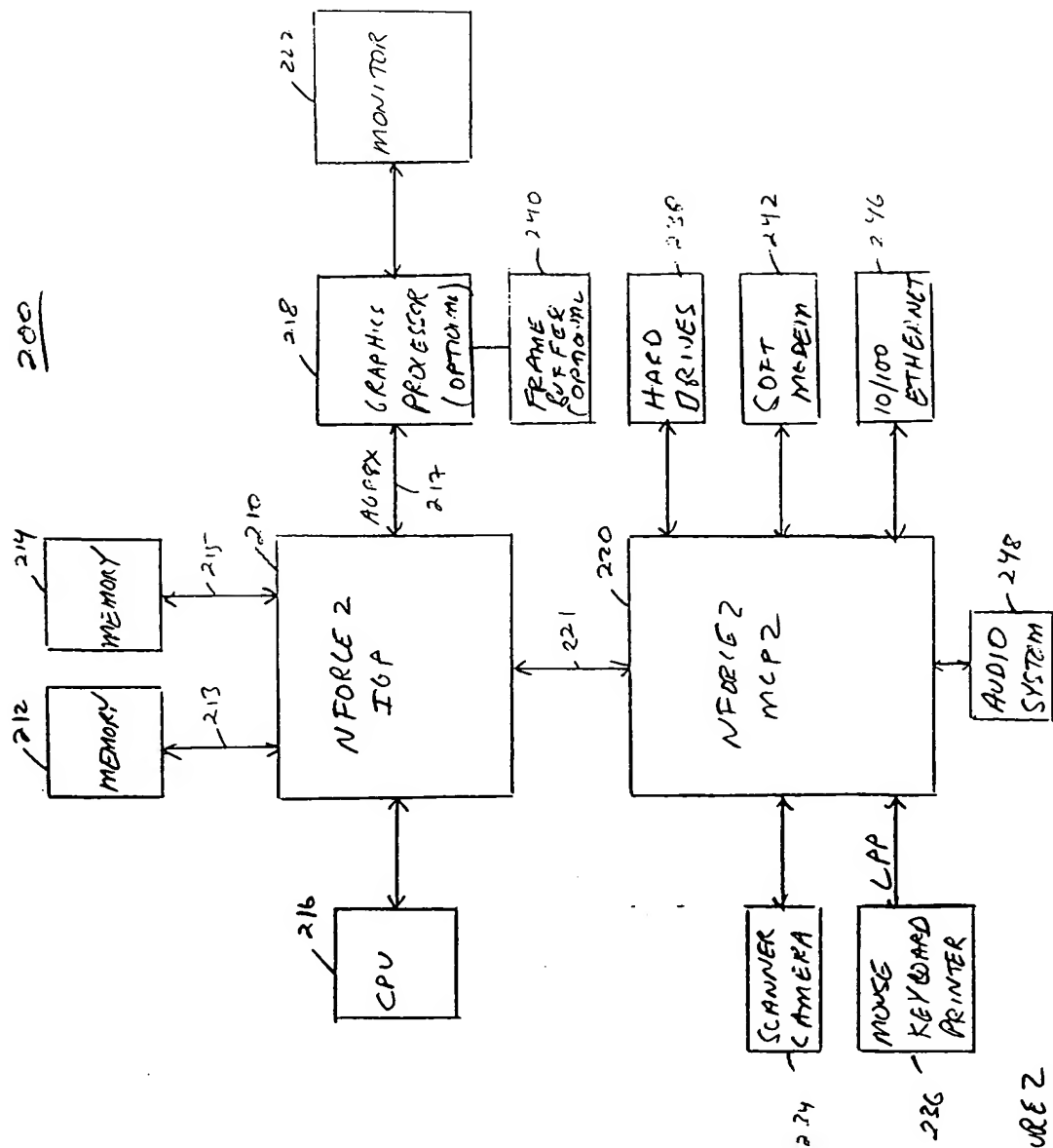
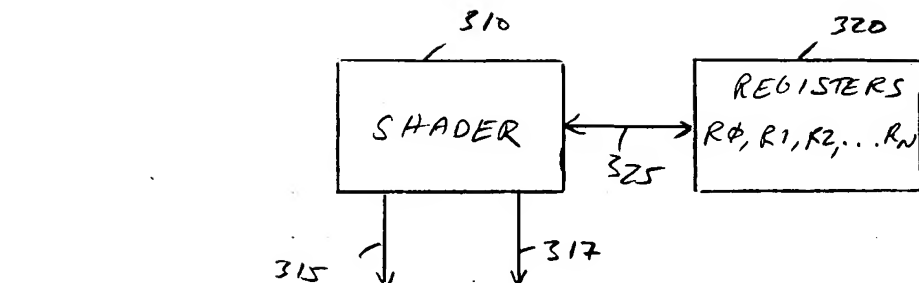


FIGURE 2



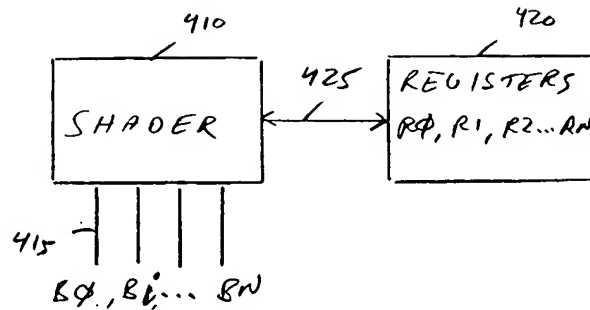
COLOR Z

330 - MULT R0, R1, R2
335 - END

ACTIVE CIRCUIT	ACTIVITY
342 - REGISTERS	READ R1
344 - REGISTERS	READ R2
345 - SHADER	MULTIPLY R1 & R2
347 - REGISTERS	WRITE R1, R2 INTO R0
349 - SHADER	WRITE R0 TO COLOR BUFFER

- PRIOR ART -

FIGURE 3



430 - MULT $R0, R1, R2$
 440 - ADD $R1, R0, R1$
 450 - END

MORE BUFFERS =
 MORE STEPS PER PASS +
 FEWER PASSES

460 ACTIVE CIRCUIT	470 ACTIVITY
462 - REGISTERS	READ $R1$
464 - REGISTERS	READ $R2$
466 - SHADER	MULTIPLY $R1R2$
468 - REGISTERS	WRITE $R1, R2$ INTO $R0$
472 - REGISTERS	READ $R0$
474 - REGISTERS	READ $R1$
476 - SHADER	ADD $R0 + R1$
478 - REGISTERS	WRITE $R0 + R1$ INTO $R1$
482 - SHADER	WRITE $R0$ AND $R1$ INTO BUFFERS

FIGURE 4

510 - MULT $R\phi$, R_1 , R_2
 520 - PST $R\phi$, $\#Z_L$
 530 - ADD $R\phi$, R_3 , R_4
 540 - PLD R_1 , $\#Z_H$

550 - PLD $R\phi$, $\#id$ INDIRECT (FIXED)
 552 - PLD $R\phi$, $@R_1$ IDENTIFICATION (MOVABLE)
 554 - PLD $R\phi$, $\#address$ DIRECT REFERENCE
 556 - PLD $R\phi$, $@R_1$ ADDRESS

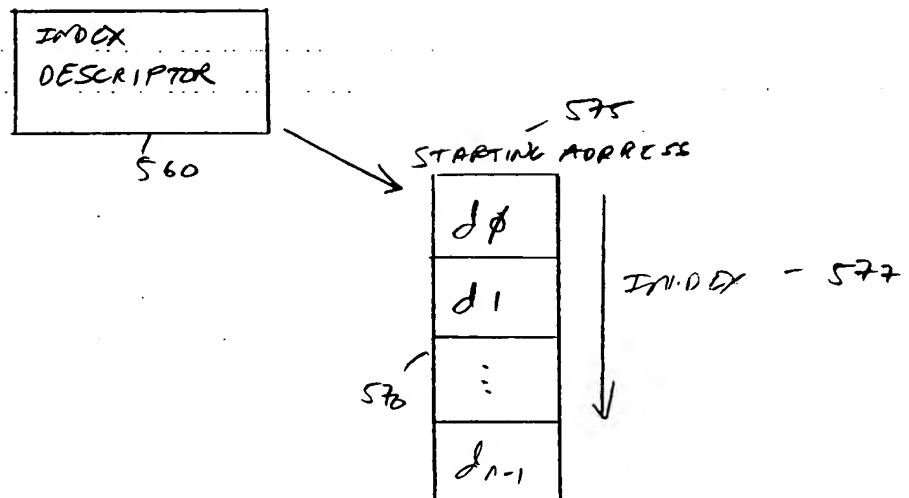


FIGURE 5

610 - IF ($Z_L < Z$ AND $Z < Z_H$) SET $Z_H = Z$

620 - IF ($Z < Z_L$) SET $Z_H = Z_L$, SET $Z_L = Z$

		IF:	THEN:			IF:	THEN:		
↑ 630	INCREASING Z	632	$Z_H = Z$	↑ 640	INCREASING Z	642	$Z_H = Z_L$		
			$Z \Rightarrow$				$Z_L = Z$		
			$Z_L = Z_L$				Z		
COMMANDS		650		670	672	674	676	678	679
				R0	R1	R2	R3	ZH	ZL
652	PLD	R0, #ZL		ZL	-	-	-	ZH	ZL
654	PLD	R1, #ZH		ZL	ZH	-	-	ZH	ZL
656	LT	R2, R0, Z		ZL	ZH	FALSE	-	ZH	ZL
658	LT	R3, Z, R1		ZL	ZH	FALSE	TRUE	ZH	ZL
660	AND	R3, R2, R3		ZL	ZH	FALSE	FALSE	ZH	ZL
662	PSTC	#ZH, Z, R3		ZL	ZH	FALSE	FALSE	ZH	ZL
664	PSTC	#ZL, Z, ~R2		ZL	ZH	FALSE	FALSE	ZH	Z
665	PSTC	#ZH, R0, ~R2		ZH	ZH	FALSE	FALSE	ZL	Z

FIGURE 6

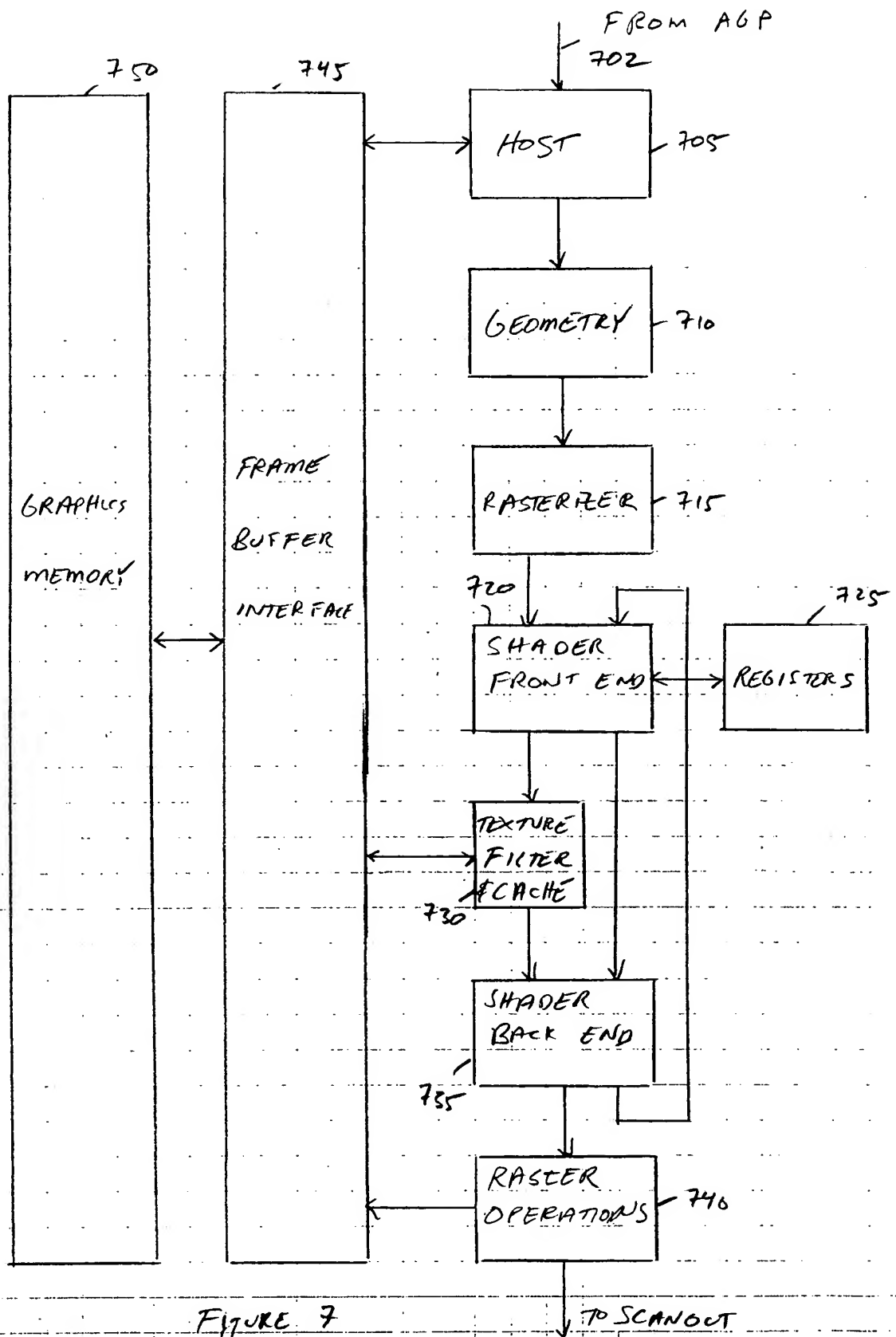


FIGURE 7